

REMARKS/ARGUMENTS

Claims 21 and 22 have been rejected under 35 USC 102(b) as being anticipated by Collins et al. Claim 21 has been amended to incorporate claim 23 limited to selection from the group of a tire strip, a rebar, a wire and a railroad rail as the reinforcement element of the structural member.

The specific claims 16 and 17 for the reinforcement element being a tire strip, a rebar, a wire and a railroad rail have been rejected under 35 USC 103(a) as being unpatentable over Collins et al. in view of Neefe, and further in view of Richards. The examiner has stated that Collins et al. in combination with the teachings of Neefe shows all of the features claimed except for the disposition of a reinforcing element in a mold prior to adding a composite mixture into said mold.

The examiner refers to Richards as disclosing a method for manufacturing composite railroad ties, as shown in Figures 1 through 16, where said method includes the step of disposing a reinforcing element, defined as part # 80 into the mold. It is further stated by the examiner it would have been obvious to one of ordinary skill in the art at the time of the invention, to dispose a reinforcing element into a mold prior to the addition of a composite mixture for forming a composite railroad tie, as taught by Richards, in combination with the manufacture of structural members from existing wood and thermoplastic products and materials as disclosed in the other cited art for the purpose of providing a means for increasing the strength and stiffness of a composite railroad tie.

The Richard disclosure is actually a narrow disclosure of an elongated inner strengthening core 80 made from specific material of thermoplastic, wood, laminated wood, bound carbon fiber, bound glass fiber and mixtures thereof (Column 7, line 10). This material is generally of the same composition as the structured member being produced. The disclosure includes preferring thermoplastic such as polyethylene for the core 80 for bonding with the binding consistent of the main body portion 30 (column 7, lines 32 through 40). The core 80 is also disclosed as an "I" or "T" beam (column 7, lines 21 through 31) having a longitudinal axis substantially parallel to the longitudinal axis of the main body portion 30 (column 6, lines 66 through 67).

It is believed that the Richard's patent teaches away from the invention of the instant application. The Richard's patent neither discloses or anticipates use of reinforcing elements as now claimed in amended claim 21 (or in amended claim 1) and as originally disclosed in the application at page 6 and 7 in paragraphs [0018] and [0019]. The instant application claims use of waste materials for manufacture of structural elements. The disclosure in the specification specifically address materials, tire strips, rebar, wire, and railroad rails as reinforcing material for the structural member. The cited art teaches away from such structure in that use of for example thermoplastic in a particular shape and orientation are necessary as a reinforcing structural element. This is not the instant invention. As noted in the Chicago case, even in cases where a single prior art reads more closely on a device where rearrangement of parts is a patentability issue, "The mere fact that a worker in the art could rearrange the parts of the reference device to meet the terms of the claims on appeal is not by itself sufficient to support a finding of obviousness. The prior art must provide a motivation or reason for the worker in the art, without the benefit of appellant's specification, to make the necessary changes in the reference device". Ex parte Chicago Rawhide Mfg. Co., 223 USPQ351, 353 (Underline added, MPEP 2144.04, VI, C).

Based on the amendment to claim 21 (and also to claims 1 and 19) it is believed claim 21 is not anticipated and is not obvious and should be allowed. Analogously claims 1 and 19 should also be allowed.

Claim 22 is now based on what is believed to be an allowable claim 21 and therefore should be allowed.

Claims 1 through 13, 18 and 23 have been rejected under 35 USC 103(a) as being unpatentable over Collins et al. in view of Neefe. Claim 1 has been amended to include the elements of claims 16 and 17. It is believed that based on this amendment, see the remarks above regarding claim 21 (and claim 1), that claim 1 should be allowed.

Claims 2 through 13 and 18 are now based on what is believed to be an allowable claim 1 and therefore should be allowed.

Claim 23 has been canceled.

Claims 14 and 24 have been rejected under 35 USC 103(a) as being unpatentable over Collins et al. in view of Neefe and further in view of Brown.

Claims 14 and 24 are now based on what are believed to be allowable claims 1 and 21 and therefore should be allowed.

Claims 15 and 25 have been rejected under 35 USC 103(a) as being unpatentable over Collins, et al. in view of Neefe and further in view of Nosker et al.

Claims 15 and 25 are now based on what are believed to be allowable claims 1 and 21 and therefore should be allowed.

Claims 16 and 17 have been rejected under 35 USC 103(a) as being unpatentable over Collins et al. in view of Neefe and further in view of Richards.

Claims 16 and 17 have been cancelled and the elements of the claims incorporated in claim 1, see previous remarks regarding claims 1, 19 and 21.

Claims 19 and 20 have been rejected under 35 USC 103(a) as being unpatentable over Collins et al. in view of Neefe and further in view of Brown, Nosker et al. and Richards.

Claim 19 has been amended as discussed previously to incorporate the specific materials of the reinforcement element analogously to claims 1 and 21 and therefore is believed to be allowable as previously remarked.

Claim 20 is now based on what is believed to be an allowable claim 19 and therefore should be allowed.

It is believed with the clarifying amendments that the uniqueness of the instant invention is not disclosed in the cited art. Applicant believes that the unique solution although being simple in its implementation was not obvious to those involved in the art of structural member design.

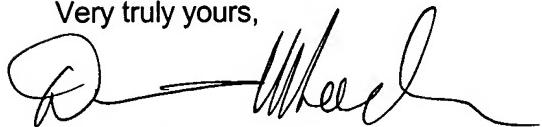
Accordingly it is believed that the rejections under 35 USC Section 102(b) and 103(a) have been overcome by canceling and amending of the claims and the remarks, and withdrawal thereof is respectfully requested.

In view of the above, it is submitted that the claims are in condition for allowance. Reconsideration of the cause for rejections and objections is requested. Allowance of claims 1 through 15, 18 through 22 and 24, 25 is earnestly solicited.

No additional fee for claims is seen to be required. An extension is requested under 37 CFR § 1.17(a) for one month to August 22, 2004 for a fee of \$55.00.

If you have any questions do not hesitate to contact me.

Very truly yours,



DENNIS W. BEECH
Reg. No.: 35,443

DWB/ab

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